

REMARKS

In the Office Action dated May 20, 2004, claim 51 was rejected under 35 U.S.C. § 112, ¶ 2; claims 1-6, 15, 21, 22, 24, 25, 28-30, 35-37, 43, 44, 46, 47, and 49-51 were rejected under § 102 over U.S. Patent No. 5,845,113 (Swami); and claims 7-14, 16-20, 31-34, 38-42, 45, 48, and 52 were rejection under § 103 over Swami in view of U.S. Patent No. 5,692,182 (Desai).

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REJECTION UNDER 35 U.S.C. § 112, ¶ 2

Claim 51 has been amended to address the rejection.

REJECTIONS UNDER 35 U.S.C. §§ 102 AND 103

Claims 1, 5, 35, and 36 have been cancelled, without prejudice, to render the rejections of those claims moot.

Claim 7 has been amended from dependent form to independent form, with the scope of the claim remaining *unchanged*. It is respectfully submitted that the obviousness rejection of claim 7 is defective for at least the following reason: even if they can be combined, the hypothetical combination of Swami and Desai fails to teach or suggest *all* elements of the claim. See M.P.E.P. § 2143 (8th ed., Rev. 2) at 2100-129.

As implicitly conceded by the Office Action, Swami fails to disclose that each parallel task provides a code to indicate if the task is to be re-invoked in the next phase. Instead, reliance was made on Desai as teaching this missing element. The Office Action cited specifically to column 11, line 47-column 12, line 17 of Desai as teaching this particular element. It is respectfully submitted that the cited passage of Desai does not teach or suggest that each parallel task provides a code to indicate if the task is to be re-invoked in the next phase.

Desai relates to decomposing a large query into multiple parallel tasks and allocating the parallel tasks across multiple database systems. Desai, 5:43-45. Each parallel task represents a sub-query that is a different part of the original query. Desai, 5:51-53. The passage of Desai in columns 11 and 12 cited by the Office Action describes a binding process that takes place in which a query is decomposed and a plan is developed to process the decomposed query. Desai, 11:52-54. An alleged benefit offered by the Desai technique is that the query only has to be bound once, with the developed plan being applicable to run the query against changed data. Desai, 12:5-9. In other words, what Desai proposes is the avoidance of developing different query plans each time a query is submitted to a database system. The avoidance of re-generating a query plan with each submission of a query is not the same as executing a plurality of multi-phase parallel tasks in response to a request to perform data operations upon data in a database, where *each* parallel task provides a code to indicate the task is to be re-invoked in the next phase.

In fact, as contemplated by Desai, the “preferred embodiment of the present invention is a two step process (steps 500 and 506).” Desai, 12:5-6. As depicted in Figures 5A and 5B of Desai, step 500 is the binding step, while step 506 is the query submission step (where the user application sends a query to be run). Step 506 involves the user application sending the query to the originating DBMS 304 a second time. Desai, 11:64-66. Thus, both steps 500 and 506 are performed by the user application. Any messaging sent by such a user application cannot be considered the code provided by *each* parallel task to indicate if the task is to be re-invoked in the next phase.

Because Swami and Desai both lack this specific element of claim 7, it is respectfully submitted that the hypothetical combination of Swami and Desai does not teach or suggest *all* elements of the claimed invention. For at least this reason, a *prima facie* case of obviousness has not been established with respect to claim 7.

Claim 11 has been amended from dependent form to independent form. With respect to claim 11, the hypothetical combination of Swami and Desai fails to teach or suggest determining whether an additional phase is required to execute the tasks based on codes returned by the tasks, and scheduling an additional phase in response to the determination that an additional phase is required. As noted above, neither Swami nor Desai teaches or suggests determining whether an additional phase is required based on codes returned by plural tasks.

Independent claim 15 is allowable over the references for similar reasons as for claim 7.

Independent claim 38 is allowable over the asserted combination of Swami and Desai for reasons similar to those of claim 1.

Independent claim 22 was rejected as being anticipated by Swami. Applicants respectfully disagree, as Swami does not disclose a client system *separate* from the database system and coupled to the database system over the network, with the client system to establish *plural sessions* with the database system to implement a plurality of data operations upon the database system in parallel. The Office Action cited column 5, line 52-column 6, line 13 as teaching the database system. The cited passage refers to the database of Figure 1, which has a shared-nothing distributed architecture. If the database depicted in Figure 1 is considered the database system, then there is no client system that

is *separate* from the database system, and coupled to the database system over the interconnection network of Figure 1.

Moreover, there clearly is no teaching by Swami that any client system is able to establish plural sessions with the database system to implement a plurality of data operations upon the database system in parallel. Swami states that a user query can be entered in the database to request information. Swami, 6:41-42. The Office Action cited to column 6, line 51-column 7, line 33 as teaching this element of claim 22. This cited passage refers to a coordinator site (logical site 17 of Figure 1) selecting storage sites, sort sites, merge sites, and sink sites to perform defined tasks. There is no indication whatsoever of a client system establishing plural sessions with a database system to implement a plurality of data operations upon the database system in parallel. Although the coordinator site 17 of Swami sends signals or commands to the various sites to perform tasks in parallel, the concept of a client system establishing sessions is absent in Swami. Therefore, claim 22 is not anticipated by Swami.

Independent claim 28 is similarly allowable over Swami.

Dependent claims are allowable for at least the same reasons as corresponding independent claims. Moreover, with respect to claim 43, the Office Action cited to column 6, lines 34-49, as teaching the element "waiting for a message from each of the first and second software components prior to proceeding to a second phase." The cited passage refers to a user query being entered into a database to request information. There is no indication whatsoever in the cited passage of waiting for a message from each of first and second software components prior to proceeding to a second phase.

Dependent claims 46 (which depends from claim 15) and 50 (which depends from claim 29) are similarly not taught or suggested by Swami.

In view of the foregoing, allowance of all claims is respectfully requested.

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The Commissioner is authorized to charge any additional fees, including extension of time fees, and/or credit any overpayment to Deposit Account No. 50-1673 (9433).

Respectfully submitted,



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